



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,138	08/14/2006	Reinhard Strey	100725-51 KGB	1943
27384	7590	01/05/2011	EXAMINER	
Briscoe, Kurt G. Norris McLaughlin & Marcus, PA 875 Third Avenue, 8th Floor New York, NY 10022			WANG, CHUN CHENG	
			ART UNIT	PAPER NUMBER
			1763	
			MAIL DATE	DELIVERY MODE
			01/05/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/566,138	Applicant(s) STREY ET AL.	
	Examiner Chun-Cheng Wang	Art Unit 1763	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-7 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 8-15 and 17-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the Amendment filed 10/25/2010. The new grounds of rejection set forth below are necessitated by applicant's amendment. Claim 16 has been cancelled. Claims 1-15 and 17-19 are now pending.
2. The objections and rejections not addressed below are deemed withdrawn.
3. The text of those sections of Title 35, U.S. Code not included in this section can be found in a prior Office Action.

Claim Rejections - 35 USC § 102

4. Claims 1, 2 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Dennis et al. (US 2002/0120015, referenced as Dennis hereinafter).

Claim 1: Dennis discloses bi-continuous microemulsions wherein microdomains of oil (read on component (B) which can be employed as a fuel) and water are interdispersed within the system [0007]. The microemulsion systems consisting of oil, water, and appropriate emulsifiers can form spontaneously and are therefore thermodynamically stable [0004]. The microemulsions have interfacial tension of less than 0.1 dynes/cm (0.1 mN/M) [0079]. Amphiphilic components ([0068] and [0069]) forming a film are used.

Claim 2: The aqueous component is mixed solvents such as water and alcohol or propylene glycol [0064].

Claim 5: The microemulsions are temperature stable (See TABLE 2).

Claims 6 and 7: Preferred surfactants include nonionic and anionic surfactants [0067].

Allowable Subject Matter

5. Claims 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is an examiner's statement of reasons for allowance:

The present claims are allowed over the closest references: Dennis et al. (US 2002/0120015, referenced as Dennis hereinafter).

Dennis discloses bi-continuous microemulsions wherein microdomains of oil (read on component (B) which can be employed as a fuel) and water are interdispersed within the system [0007]. The microemulsion systems consisting of oil, water, and appropriate emulsifiers can form spontaneously and are therefore thermodynamically stable [0004]. The microemulsions have interfacial tension of less than 0.1 dynes/cm (0.1 mN/M) [0079]. Amphiphilic components ([0068] and [0069]) forming a film are used.

However, Dennis does not teach or fairly suggest the claimed thermodynamically stable bicontinuous one-phase microemulsion comprising an aqueous component (A), a hydrophobic component (B), an amphiphilic component (C/D) and, optionally, one or more members selected from the group consisting of salts and additives (E), wherein said microemulsion is a nanostructured mixture simultaneously comprising a continuous aqueous phase and a continuous hydrophobic phase separated from each other by an amphiphilic film on a microscopic level, said microemulsion has an interfacial tension range between 10^{-1} and 10^{-4} mN/M, and the hydrophobic component (B) contains one or more substances which can be employed as a fuel,

Art Unit: 1763

and wherein said hydrophobic component (B) contains: (i) at least one mineral oil-based fuel; and/or (ii) at least one fuel based on vegetable oils or their derivatives.

There is no prior art of record, alone or in combination teach or fairly suggest the claimed thermodynamically stable bicontinuous one-phase microemulsion.

7. Claims 8-15 and 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is an examiner's statement of reasons for allowance:

The present claims are allowed over the closest references: Dennis et al. (US 2002/0120015).

Dennis discloses bi-continuous microemulsions wherein microdomains of oil (read on component (B) which can be employed as a fuel) and water are interdispersed within the system [0007]. The microemulsion systems consisting of oil, water, and appropriate emulsifiers can form spontaneously and are therefore thermodynamically stable [0004]. The microemulsions have interfacial tension of less than 0.1 dynes/cm (0.1 mN/M) [0079]. Amphiphilic components ([0068] and [0069]) forming a film are used.

However, Dennis does not teach or fairly suggest the claimed method of producing, use and composition of thermodynamically stable bicontinuous one-phase microemulsion comprising an aqueous component (A), a hydrophobic component (B), an amphiphilic component (C/D) and, optionally, one or more members selected from the group consisting of salts and additives (E), wherein said microemulsion is a nanostructured mixture simultaneously comprising a continuous aqueous phase and a continuous hydrophobic phase separated from

Art Unit: 1763

each other by an amphiphilic film on a microscopic level, said microemulsion has an interfacial tension range between 10^{-1} and 10^{-4} mN/M, and the hydrophobic component (B) contains one or more substances which can be employed as a fuel, wherein said amphiphilic component (C/D) contains at least one non-ionic surfactant (C), wherein said amphiphilic component (C/D) contains at least, in addition to a linear or branched surfactant (C- 1): (i) an ionic surfactant (D); and/or (ii) a sugar surfactant (C-2); and/or (iii) an alcohol; and (iv) the proportion of component (C) comprising components from the groups linear or branched surfactants (C- 1), surfactants with a core structure (C-2), cosurfactants (C-3) and efficiency boosters (C-4) selected from amphiphilic block copolymers, based on the amphiphilic component (C/D), is from 50 to 100% by weight; and/or (iv) the proportion of component (C-2), based on the total amount of component (C), is from 0 to 85% by weight.

There is no prior art of record, alone or in combination teach or fairly suggest the claimed method of producing, use and composition of thermodynamically stable bicontinuous one-phase microemulsion.

9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

10. Applicant's arguments with respect to claims 1-15 and 17-19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun-Cheng Wang whose telephone number is (571)270-5459. The examiner can normally be reached on Monday to Friday w/alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571)272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1763

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ling-Siu Choi/
Primary Examiner, Art Unit 1762

/Chun-Cheng Wang/
Examiner, Art Unit 1763

/CCW/